

CLAIMS

What is claimed is:

1 1. In an e-commerce computer network system accessible via the Internet, a
2 method of arranging delivery of an item ordered by a customer from a web browser linked
3 to the Internet, the method comprising:

4 receiving a first address from the customer via the web browser, wherein
5 the address is received by the e-commerce computer network from the customer;

6 locating a collection point for the delivery of the item, the collection point
7 including a plurality of lockers, the plurality of lockers having a plurality of physical
8 configurations, locating the collection point further including

9 searching a collection point database, wherein the collection point
10 database is remote from the e-commerce network and is coupled to the e-commerce
11 network via the Internet;

12 identifying the collection point in the collection point database;

13 selecting a courier from a plurality of couriers listed in a courier database to
14 deliver the item from a warehouse to the collection point.

1 2. The method of claim 1, wherein the collection point has a second address,
2 the second address being distinct from the first address.

1 3. The method of claim 2, wherein the second address is within a pre-
2 determined proximity of the first address.

1 4. The method of claim 1, wherein selecting the courier further includes
2 dynamically generating a plurality of prices for delivering the item to the collection point
3 by the plurality of couriers.

1 5. The method of claim 4, wherein the courier corresponds to a lowest price in
2 the plurality of prices.

1 6. The method of claim 1, wherein identifying the collection point further
2 includes
3 determining if the collection point includes a locker.

1 7. The method of claim 1, wherein identifying the collection point further
2 includes determining if a locker from the plurality of lockers in the collection point has a
3 physical configuration capable of accommodating the item.

1 8. The method of claim 1, wherein the collection point database includes a
2 plurality of collection points, and the collection point is the most proximate of the plurality
3 of collection points to the first address.

1 9. The method of claim 1, wherein selecting the courier from the plurality of
2 couriers further includes determining if the courier delivers to a second address, the
3 second address corresponding to the collection point.

1 10. The method of claim 1, further comprising
2 prior to locating the collection point, selecting a range of delivery times for the item.

1 11. The method of claim 10, wherein the range of delivery times are within a
2 single day.

1 12. The method of claim 11, wherein the range of delivery times comprises
2 three or fewer consecutive hours.

1 13. The method of claim 12, wherein the single day is identical to a day when
2 the item is ordered.

1 14. The method of claim 12, wherein identifying the collection point further
2 includes determining if the collection point is available for delivery during the range of
3 delivery times.

1 15. A product delivery system comprising:
2 an e commerce portal, the e commerce comprising a first computer
3 network coupled to the Internet which allows goods to be ordered via the Internet;

4 a courier database listing a plurality of couriers, the courier database in
5 communication with the e commerce network via a data link;

6 a plurality of collection points, each of the plurality of collection points
7 including a plurality of automated lockers, wherein the plurality of collection points have
8 distinct geographical locations and each of the plurality of collection points includes a
9 central server in communication with the e commerce portal via the Internet;

10 a collection point database, the collection point database in communication
11 with the e commerce network via the Internet, the collection point database containing a
12 plurality of collection point records, each of the plurality of collection point records
13 including

14 a first collection point field indicating a collection point from the
15 plurality of collection points,

16 a second collection point field indicating a location for the
17 collection point.

1 16. The product delivery system of claim 15, wherein the courier database
2 further includes a plurality of courier records, each of the plurality of courier records
3 further including

4 a first courier field indicating a courier from the plurality of couriers,
5 a second courier field including a unique identifier for the courier.

1 17. The product delivery system of claim 16, wherein each locker in the
2 plurality of lockers includes a keypad in communication with the central server.

1 18. The product delivery system of claim 17, wherein the data link comprises a
2 local area network medium.

1 19. The product delivery system of claim 17, wherein the data link comprises
2 the Internet.

1 20. The product delivery system of claim 17, wherein each locker includes a
2 local memory, the local memory in communication with the keypad and the central server.

1 21. The product delivery system of claim 20, wherein the courier database is
2 replicated on the local memory.

1 22. The product delivery system of claim 20, wherein each locker includes an
2 automated lock, such that access to the locker is restricted by the automated lock.

1 23. The product delivery system of claim 20, wherein each locker includes a
2 microcontroller affixed to the locker, such that the local memory is resident on the
3 microcontroller, and the microcontroller is in communication with the central server, such
4 that the microcontroller is operably coupled to the automated lock.

1 24. The product delivery system of claim 22, wherein each locker includes a
2 transponder affixed to the locker, the transponder in communication with the
3 microcontroller.

1 25. The product delivery system of claim 22, wherein each locker is coupled to
2 a bar code scanner, the bar code scanner in communication with the microcontroller.

1 26. The product delivery system of claim 25, wherein the plurality of lockers
2 has a plurality of physical configurations.

1 27. A method of processing a web-based order for a consumer product,
2 wherein the consumer product is ordered by a user via a web client from an e commerce
3 web portal, and the consumer product is to be delivered to a collection point from a
4 plurality of collection points, the collection points having geographically diverse locations,
5 the method comprising:

6 receiving the order from the client for the item, wherein the order is
7 received from the web client by a first server at the web portal;

8 identifying a first geographic address, the first geographic address
9 corresponding to a residence of the user;

10 identifying a collection point for the delivery of the consumer product,
11 wherein the collection point is selected from a collection point database, such that the
12 collection point has a second geographical address, the second geographical address being
13 within a pre-determined proximity of the first geographical address;

14 searching a courier database for a plurality of couriers which deliver to the
15 second geographical address;

16 for each courier of the plurality of couriers, determining a price for delivery
17 of the item to the second geographical address by the courier;
18 displaying a shipping options web page at the web client, the
19 shipping options web pages listing the price for delivery of the item for each courier of the
20 plurality of couriers.

1 28. The method of claim 27, wherein identifying the first geographical address
2 includes searching a cookie on the web client, wherein the first geographical address is
3 encoded in the cookie.

1 29. The method of claim 27, wherein identifying the first geographical address
2 includes receiving the first geographical address by the first server at the web portal from a
3 form on the web client.

1 30. The method of claim 27, wherein identifying the collection point further
2 includes searching a collection point database for the collection point.

1 31. The method of claim 30, wherein the collection point database is in
2 communication with the web portal via the Internet.

1 32. The method of claim 30, wherein the collection point database is located on
2 a second server at the web portal.

1 33. The method of claim 30, wherein the courier database is located remotely
2 from the web portal and the collection point database, such that the web portal and the
3 collection point database are in communication with the courier database via the Internet.

1 34. The method of claim 27, further comprising:
2 after displaying the shipping options web page, receiving an
3 identifier for a courier from the plurality of couriers at the web portal from the web client.

1 35. The method of claim 34, further comprising:
2 after receiving the identifier, scheduling a delivery for the item to
3 the second geographical address by the identified courier.

1 36. The method of claim 35, wherein the collection point includes a plurality of
2 lockers, such that at least one locker in the plurality of lockers has dimensions sufficient to
3 accommodate the item.

1 37. In an e-commerce computer network system accessible via the Internet, a
2 method of arranging delivery of an item ordered by a customer from a web browser linked
3 to the Internet, the method comprising:

4 receiving a first address from the customer via the web browser, wherein
5 the address is received by the e commerce computer network from the customer;

6 locating a collection point for the delivery of the item, the collection point
7 including a plurality of lockers, the plurality of lockers having a plurality of physical
8 configurations, locating the collection point further including retrieving a cookie, the
9 cookie stored locally at the web browser, the cookie identifying the collection point
10 preferred by the customer;

11 determining if a locker from the plurality of lockers is physically
12 dimensioned to accommodate the item;

13 determining if the locker is available for delivery of the item at a customer
14 selected time;

15 selecting a courier from a plurality of couriers listed in a courier database to
16 deliver the item from a warehouse to the locker at the collection point.

17 sending a string identifier from the e-commerce network system to the
18 customer via the web client, the string identifier indicating a password for entry to the
19 locker.

1 38. The method of claim 37, wherein the collection point has a second address,
2 the second address being distinct from the first address.

1 39. The method of claim 37, wherein selecting the courier further includes
2 dynamically generating a plurality of prices for delivering the item
3 to the collection point by the plurality of couriers.

1 40. The method of claim 39, wherein the courier has a lowest price from the
2 plurality of prices.

1 41. The method of claim 37, wherein the courier database includes a record for
2 each courier in the plurality of couriers.

1 42. The method of claim 41, wherein for each courier, the record indicates
2 whether the courier delivers to the collection point.

1 43. The method of claim 42, wherein selecting the courier further includes
2 determining that the courier delivers to the collection point.

1 44. The method of claim 37, wherein the string identifier identifies the courier.

1 45. The method of claim 37, wherein the string identifier is a dynamically
2 generated password.

1 46. The method of claim 37, wherein each of the plurality of lockers is
2 operated by a microcontroller, and each of the plurality of lockers has an automated lock
3 coupled to the microcontroller.

1 47. The method of claim 46, wherein each of the plurality of plurality of
2 lockers is coupled to a keypad, such that the keypad is in communication with the
3 microcontroller.

1 48. The method of claim 47, further comprising:
2 receiving the item at the locker from the delivery company;
3 after receiving the item at the locker, locking the locker.

1 49. The method of claim 48, further comprising:
2 after locking the locker, receiving a key sequence from the keypad;
3 sending the key sequence from the keypad to the microcontroller.

1 50. The method of claim 49, further comprising:
2 after sending the key sequence, comparing the key sequence to the
3 string identifier in the microcontroller.

1 51. The method of claim 50 further comprising:
2 if the key sequence matches the string identifier, sending a message
3 from the microcontroller to the automated lock to release the automated lock;
4 receiving the unlocking message at the automated lock;
5 in response to receiving the automated message, releasing the
6 automated lock.